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ABSTRACT

This paper reviews the concept of integration, identifies present practices in Alberta (Canada), and describes related issues and trends. Terms are clarified, current initiatives are outlined, the effectiveness of integration is discussed, and the legal and judicial context is examined. The North American experience with integration is briefly explored, and models for integration are presented, along with effective practices, cost implications, and implications for the future. Appendixes list programs for exceptional students and note limitations of integration research. (Includes 27 references.) (JDD)

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INTEGRATING EXCEPTIONAL STUDENTS INTO THE MAINSTREAM

A Background Paper

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"All children, regardless of exceptionalities are first of all children and benefit from regular association with other children within their own communities." (Council of Ministers of Education of Canada 1989)

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OVERVIEW

The purpose of this paper is to review the concept of integration, to identify present practices in Alberta and to describe some related issues and trends. The paper provides a starting point for discussion by individuals from school systems, government organizations and parent and advocacy groups. A series of regional meetings will be held across the province to discuss integration issues and receive additional comment. Following regional meetings with stakeholders and the Ministerial Forum on Special Education, Alberta Education will consider its current policies and procedures in special education and revise them as required.

Introduction

To some parents and advocates, "integration" means the full inclusion of exceptional students in regular classrooms in neighbourhood schools. For some, integration also means that the exceptional child will participate in the regular school curriculum. Others expect that integration will provide opportunities for special needs students to interact socially with other children their own age, but that these students will have an individualized program plan for instruction. A third group of advocates, particularly some parents of children with learning disabilities and children with impaired hearing support segregated programs.

For years many educators have supported the concept of integration for exceptional children. They have said that exceptional children should have as many opportunities as possible to learn and grow in situations that are similar to (or the same as) the situations experienced by "normal" children.

The trend toward integration has received increasing support over the past few years, mainly because of key court decisions and the successes of many school jurisdictions across the country and the province. A growing body of case law supports the inclusion of exceptional children into regular school activities. Parents are increasingly citing the Charter of Rights and Freedoms to challenge segregated programs. The reported success of systems such as Hamilton-Wentworth Roman Catholic School Board in Ontario, the Yellowhead School Division and other school systems in Alberta have also served as catalysts for change.

Clarification of Terms

For the purposes of this paper, the following definitions are provided:

> **Exceptional students** are "those students who require a different program or an adaptation or modification to the regular school program" (Alberta Education, Policy Manual 1989). Exceptional students are at both ends of the normal distribution curve: They are the educationally disabled and the gifted and talented. A variety of categories of students are included as follows:

Categories of Exceptionality
E.C.S. - 12

Severely Disabling Conditions

- Dependent Mentally Handicapped
- Severe Behaviour Disordered
- Multi-Handicapped
- Severe Physically Handicapped
  - including Neurological Disorders
- Deaf
- Blind

Mildly/Moderately Disabling Conditions

- Educable Mentally Handicapped
- Trainable Mentally Handicapped
- Behaviour Disordered*
- Learning Disabled*
- Hearing Impaired - Hard-of-Hearing
- Visually Impaired - Low-Vision
- Speech and Language Impaired

Gifted and Talented (Grades 1-12 only)

*Depending upon the degree of disability, these students may also be included in the category "Severely Disabling Conditions"

Integration is the process of inclusion of exceptional students in regular school programs because of:

a) a belief that exceptional students have a right to participate fully in the educational, social and recreational life of the school on equal terms with their "regular" classmates, and
b) a philosophy that accepts individuals as being of equal "worth", while acknowledging that we are all different in one way or another and that we have different needs.

Mainstreaming is "the act of combining the skills of regular and special educators to assure all children equal educational opportunities and to develop alternative strategies supportive of the provision of appropriate services in the least restrictive setting", a setting "which meets their unique needs and which is the closest approximation of the placement experienced by non-handicapped students" (Ruhl, pp.3-4).

NOTE: **The close relationship between integration and mainstreaming often causes these terms to be used interchangeably and thus will be used synonymously for the purposes of this background paper.**

Least restrictive environment refers to having each child served in a setting that is as close to normal as possible while still meeting the special and unique needs of the child. The child is integrated into the regular physical and social settings to the maximum extent appropriate Ruhl (1983).

Normalization according to Ruhl (1983), is most commonly used in reference to the severely and profoundly disabled populations. It is both a process and a goal. The intention is to make the experiences of individuals with disabilities as similar to those of their non-disabled peers as possible so that they will have a chance to develop "normal" behavior and characteristics.

Inclusive schooling "provides programming for all students (including students with severe disabilities) in the mainstream of regular education" (Stainback & Stainback, in press, 1990). In an inclusive school every student is included in regular education and regular classes. An inclusive school also provides all students, within the mainstream, appropriate educational programs that are challenging yet geared to their capabilities and needs, and any support and assistance they or their teachers require.

Inclusive schools are different from schools that practice mainstreaming and integration. Inclusive schools develop accommodating environments for all students while mainstreaming or integration practices attempt to fit certain students into what currently exists.

The Most Enabling Environment encourages exceptional students to learn as much as they can and to develop as completely as possible. Contributing factors are:

- students' and parents' willingness to participate in the regular classroom;
- the availability of programs and support personnel;
- the attitudes and awareness of students who have, or do not have, disabilities;
- the professional training and attitudes of teachers; and
- the attitudes and concerns of the community.

BACKGROUND

Current Initiatives

Integration continues to be an issue in education. In November 1990, Minister of Education, Jim Dinning, addressed the Alberta School Trustees' Association Annual Convention. He said:

> Our focus will be as doing what's best for these kids . . . . developing their full potential. Integration will give them the chance they need to learn, to grow, to become full participants in our schools and in our society. Only for a small few will specialized programs be required to meet their complex medical and learning needs.

Similarly, the Brassard Report "Claiming My Future" (1989) supports moving towards full integration for children with disabilities:

> That all educational services (in Alberta) be fully mainstreamed within the regular school system with appropriate support available to both students and educators.

A committee of The Alberta Teachers' Association stated its position on integration in the October 23, 1990, issue of the ATA News:

> The association supports in principle the goal of total integration of students with mental disabilities into the regular classroom.

The ATA qualified its position by stressing that support for integration should not put regular education services in jeopardy. The ATA called for: supports to both students and teachers, curriculum adaptations, early intervention and a request for Alberta Education to look at certain aspects of funding for the provision of integration.

In the spring of 1990, The Premier's Council On the Status Of Persons With Disabilities (Alberta), stated one of its objectives for education:

> By the year 2000, all children will have, as their right, access in their home communities, in the neighborhood schools, to the same quality of education which is available to all other students.

The Premier's Council's Integration Paper (June 1990) states that there are instances where the nature or degree of disability makes learning in a regular classroom difficult, but due to the evidence of successful integrated practices that "integration ought to be the first choice for the vast majority of children."

These and other statements demonstrate a general change in the thinking and attitudes of society. People are supporting a move away from exclusion and a move towards inclusion of disabled children and adults in the school and community.

Effectiveness of Integration

1) Academic Effects

No clear academic benefits have been demonstrated for regular versus special class placements. Some studies favor self-contained special classes, while others indicate no significant differences between the two settings or no advantage in regular classes (Epps & Tindal, 1987).

In an attempt to clarify this issue, two meta-analyses were conducted to examine and compare the relative merits of special education versus regular class placement. The purpose of a meta-analysis as defined by Epps and Tindal (1987) is to "draw conclusions about a certain topic by systematically analyzing and integrating the results of a large number of studies" (p. 225). The first of these meta-anaylses, conducted by Carlberg and Kavale (1980), used 50 studies between 1932 and 1977. They concluded that special class settings were inferior to regular class placements. However, special class placements were found to be preferable for learning disabled (LD) and behaviorally/emotionally disturbed students.

In the second meta-analysis, Wang and Baker (1985-86) selected eleven studies done between 1975 and 1984. Their findings also provided support for mainstreaming but they found no differences in the effects of integration among various handicapping conditions.

2) Social Effects

Gresham (1982) suggested that although the concept of mainstreaming to promote social interaction would seem desirable, it is based on several faulty assumptions. The first assumption is that physical placement of children with handicaps in regular classrooms will result in increased social interaction between handicapped and non-handicapped children. The second erroneous assumption is that regular class placement for handicapped children will result in greater social acceptance of the handicapped children by their non-handicapped peers. Thirdly, handicapped children in mainstreamed classes are assumed to model the behavior of their non-handicapped peers. A consistent pattern has emerged from the many sociometric studies which indicates that these assumptions are indeed inaccurate. While mainstreaming allows for increased social contact between handicapped and non-handicapped individuals, it does not ensure the social acceptance or increased appropriate social behavior of handicapped students (Fox, 1989).

Several researchers have examined the sociometric status of students with a variety of handicapping conditions in mainstreamed classes. In 1985 Sabornie summarized the results of studies involving educable mentally retarded, learning disabled, emotionally disturbed (ED), visually impaired and hearing impaired students. The results indicate that, in general, handicapped students are not well accepted by their non-handicapped peers.

Very little research has been done on the social effects of integration on non-handicapped students. Sasso and Rude (1988) suggested that integration efforts can have a positive social effect on non-handicapped students providing there is a structured and carefully implemented social intervention program. However, due to the methodological limitations of this study, these results need to be interpreted with caution.

The research findings generally indicate that the social integration of handicapped students has not been successfully achieved. Gresham (1982) and Madden and Slavin (1983) suggested that handicapped children are placed in regular classrooms without the necessary prerequisite social skills and without ongoing support to enhance these skills. Non-handicapped students are also not provided with support to modify their attitudes towards their handicapped peers. Consequently, in situations where ongoing support in social skills training is not provided, mainstreaming efforts are likely to result in increased social isolation and more restrictive social environments (Gresham, 1982). That is not to say that attempts to socially integrate handicapped children should be abandoned, rather, in order to ensure the social-emotional growth of integrated students, appropriate support services must be in place.

Limitations of the Research

Ruhl (1983) suggested that "conclusive statements as to actual effectiveness of mainstreaming outcome are not currently possible due to the contradictory results of the research" (p. 9). This contention was supported by Reynolds and Birch (1988) who indicated that it is still too early to make statements about the relative outcomes of mainstreaming with any certainty. Several factors contribute to the difficulty in drawing conclusions: the relative newness of the practice of integration, a reliance on unstructured and uncontrolled "studies", and the methodological flaws in empirical research.

Further explanation of the limitations is included in Appendix A.

Legal Context

o School Act

Section 29 of the School Act deals with "Special Education Programs". The Act provides for recognition of special needs students and speaks to a broad range of characteristics of students with special needs.

The Act states that a board may determine that a student is in need of a special education program and when such a determination is made, that student is entitled to have access to a special education program. Before a placement is made in a special education program the board must consult with the parents of the student and, where appropriate, with the student. The Act however does not prescribe the delivery of programs.

o Alberta Education Policy

Alberta Education policy states that "school boards are encouraged, whenever appropriate, to provide programs for exceptional students in regular school environments."

This statement is supported by the Brassard Report and the report of the Premiers' Council on Persons with Disabilities. Both reports advocate integration as the first choice in determining placement. However, while integration should be the first choice, the specific needs of the student may require a portion of their school program be provided in a non-integrated setting.

Special Education Placement Appeals

Under the School Act, parents are able to request that the Minister of Education review specific issues, including placement of children in special education programs. Parents who disagree with a decision made by their school board regarding the placement of their child in a special education program may appeal to the local board through a local appeal process. Following the local appeal those parents who are still not satisfied with the board's decision have the right to request that the Minister review the case to determine whether or not the placement made by the board was adequate in terms of meeting the child's needs.

Since the legislation on Ministerial reviews came into effect on December 31, 1988, the Minister has conducted a number of special education placement reviews. In addition, some disagreements between parents and school boards have been successfully mediated without the need for a formal Ministerial review.

Two landmark Special Education Placement Reviews took place during 1990. The first review in August occurred when parents appealed the school boards decision to place their child in a special education program rather than in their neighborhood school. A Review Committee assisted the Minister of Education in reviewing the case, and the Minister recommended that the child be placed in the special education program which was adequate to meet the needs of the child at this time. The Minister also recommended that the child's progress be monitored and assessed over the next five months, with a view to placing the child in the neighborhood school at the beginning of the next school term. Another recommendation was that the parents were to be directly involved with the school in working towards a suitable placement for the child and that the school board review it's own appeal procedures to address this problem.

The second case, in September of 1990, was also an appeal by parents as to the special education placement of their child. The Minister, again assisted by a Review Committee, recommended that the child be placed into a regular classroom in the neighborhood school and that an additional teacher aide be provided. He also recommended that a school based collaborative approach be used to involve the principal, the child's teacher, the teacher aide, the school counsellor, other school board staff, and her parents in planning and monitoring the child's program.

Canadian Court Decisions

Parents are citing the Charter of Rights in their challenges to school officials regarding special education placement decisions. Widespread debate continues in Alberta, among educators and others, about whether special classes or integration into the regular class will provide the most enabling environment for an exceptional child.

In the case, **Bales v. Board of Education, School District No. 23, Central Okanagan School Trustees,**[1] the court emphasized that fair procedure in an education context need not be a full blown court process. In this case, the school officials decided to place the mentally disabled child in a segregated school and the parents wanted their child to be placed in the special education class offered by the regular school. The parents failed to demonstrate that the school's placement was unreasonable.

In **Yarmaloy v. Banff School District No. 102, 1985** [2] the court was more receptive of the parents' arguments regarding the lack of fair procedure. The judge did not reverse the school's decision for a segregated placement. However, he did order that the school authorities conduct a hearing which allows for proper parental input prior to deciding the child's special education placement.

In 1989, the New Brunswick Court of Appeal in **Robichaud v. School Board No. 39, 1985** [3] set aside the injunction granted by the lower court that had the effect of requiring a school board to integrate an exceptional child into a regular Grade 8 class. The lower court had ruled in favor of integration; the Court of Appeal overruled the decision and supported the school board's position that integration was not appropriate for the child.

The Charter of Rights will continue to have a significant impact in the future. The courts may review special education placement decisions and/or program decisions based upon guarantees in the Charter under section 7, "appropriate education" or with the "equal benefit of the law" protections under section 15.

Additional comments about the Charter are made in the next section.

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1 (1984), 8 ADM. L.R. 202 (BC SC).
2 (1985), 16 ADM. L.R. 147 (Alberta Q.B.).
3 Robichaud v School Board No. 39 - New Brunswick Court of Queen's Bench January 20, 1989 - unreported, appealed but decision has not been made.

THE NORTH AMERICAN EXPERIENCE

United States

In the United States during the 1950s and 1960s, concern about special education centered around these questions: Were special education classes providing remediation of students' difficulties? Was a stigma attached to special education placement? Was there a variability in the quality of instruction in special education classes? What was the return rate to regular classes from special education classes?

Parent organizations and professional groups began exerting pressure and influence on legislators by lobbying for improved services in special education. The culmination of this movement was the enactment of The Education for All Handicapped Act of 1975 (PL 94-142) which defined the educational rights for children with disabilities. The purpose of PL 94-142 was:

...to assure that all handicapped children have available to them a free appropriate public educationwhich emphasizes special education and related services designed to meet their unique needs, to assure that the rights of handicapped children and their parents and guardians are protected, to assist States and localities to provide for the education of all handicapped children, and to assess and assure the effectiveness of efforts to educate handicapped children" (Taylor & Searl, 1987, p. 40).

As a result of the implementation of PL 94-142, children with disabilities began to enter regular schools and regular classes in ever-increasing numbers.

Canada

Canada has also experienced a rise in parent advocacy groups and demands for special education services. Since in Canada education is a provincial responsibility, there is no federal legislation equivalent to the American Education of All Handicapped Children Act PL 94-142. However, each province and territory has education legislation and related regulations, policies and procedures. Manitoba, New Brunswick, Newfoundland, Nova Scotia, Ontario, Quebec and Saskatchewan have mandatory legislation which guarantees access to special education. British Columbia, Prince Edward Island, and both Territories have permissive laws which allow the option of providing special educational services to handicapped children but school boards are under no legal obligation to do so. Alberta requires that a school board provide for the education of each child resident in its district. Through policy, Alberta Education expects school districts to identify children with special needs and subsequently provide them with appropriate education programs (Winzer, 1990).

As previously mentioned in the section on court decisions, it should be noted that the Canadian Charter of Rights and Freedoms (1985) applies to all provincial school legislation and, therefore, allows parents to challenge the validity of statutes that would exclude exceptional children from access to an education. Section 15(1) states that all individuals are "equal before and under the law" and have the "right to the equal protection of the law without discrimination" (Hill, 1988, p. 124). Alberta Education's 1987 Program Adequacy Document states that "although it is as yet unclear what the term `equal' means when it applies to education, this section is being taken to support clearly the right of everyone to an education. It may be invoked if a parent feels that one child, because of a handicapping condition, is being denied a benefit which is provided to others" (p. 5). This clearly has ramifications for the integration issue.

A report entitled Special Education Information Sharing Project (Council of Minister of Education, Canada, 1989) states that across Canada there are ongoing efforts to maximize special education placements by providing as much integration with the regular school population as possible. In addition, the provinces and territories are ensuring that legislated guarantees are being provided. There is also a trend towards definitions based upon instructional needs and policy directions which promote integration wherever possible. The report concludes that:

> All Children, regardless of exceptionalities, are first of all children and benefit from regular association with other children within their own communities.

Alberta

Alberta schools approach special education in a variety of ways. Special needs students of all ability levels are sometimes fully integrated into the regular classroom. In other cases exceptional children are offered a core program in special education classrooms with partial integration into the regular classroom. Or, students with severe disabilities may be enrolled in completely segregated classrooms or attend programs in segregated schools. Most segregated programs have some component of regular classroom integration. Learning disabled students are served through either the resource room pull-out model or the in-class teacher consultative model. Integration models tend to be influenced by such factors as school board philosophy and size, geographical location, availability of local expertise and parental input.

The Education Response Centre has analyzed special education content in all courses offered by Alberta universities to teachers and paraprofessionals. Only one university in Alberta requires that a student taking a Bachelor of Education (non-special education) program have a survey course on exceptional students.

The Education Response Centre also conducted a survey to determine the inservice needs of teachers, principals and central office administrators in the area of special education. Of the regular teachers who were surveyed, 63 percent had no formal university or college courses in the field of special education. Further, the majority of special education courses offered at Alberta universities do not contain information on integration practices.

Alberta Education monitors selected special education programs across the province on an annual basis. A summary of the monitoring reports indicates that districts across the province are generally moving towards the integration of exceptional students into regular classrooms.

The Alberta Teachers' Association Special Education Council is conducting a survey of teachers attitudes toward integration programming. The survey has been sent to randomly selected teachers across Alberta and a report will be compiled by the Specialist Council later in 1991.

Trends in the United States regarding mainstreaming have had significant impact upon developments across Canada. The Council of Ministers Report (1989) indicates that various ministeries and departments of education are attempting to provide a broad continuum of approaches from placement of exceptional students in regular classes with support services but no specialized education, to special education classes within local schools.

Education in Canada is a provincial responsibility. Each province has developed its own policies and practices. Alberta Education has taken steps to initiate activities designed to enhance the delivery of programs and services to meet the needs of all students.

Alberta Education has been incorporating current information regarding students' intellectual, social/emotional and physical growth into the curriculum. The document **Students' Thinking Developmental Framework Cognitive Domain (1987)** is an example of efforts that are being made to ensure that the school curricula are developed to meet and extend students development through the cognitive stages.

In addition, Alberta Education issued a policy statement on Articulation of Children's Learning Experience in March 1988. This policy is designed to ensure continuity in children's ECS through grade six learning experiences. The focus is on providing instructional strategies which are consistent with principles of child development and an emphasis upon integrated instruction.

The opportunity is available for Alberta Education in collaboration with jurisdictions, organizations, other government departments and universities to develop programs and strategies which will accomodate the needs of all students.

MODELS FOR INTEGRATION

Several administrative models can be used to integrate exceptional students in regular school programs. Six of these models are described briefly in this section.

o Cascade Model

Alberta Education has adopted and modified the Cascade Model of Service Delivery (Alberta Education, 1987). This model presents a variety of service delivery options, ranging from full integration to full segregation, according to the individual needs of special education students. A diminishing ratio of students to adults occurs as the severity of the handicap increases. The least restrictive environment for each student depends upon that student's unique needs. For example, a severe handicap may dictate a more protective environment.

o Modified Cascade Model

Reynolds and Birch (1988) described a Modified Cascade Model in which "regular classes are made educationally more powerful, in that they have more human and material resources. They are made more diverse, in that in the regular class personnel and materials have, among them, a greater variety of knowledge and skills" (p. 26).

The emphasis in this model is on moving various forms of specialized instruction into the regular class in order to manage individualized instruction for all students. Reynolds & Birch (1988) cautioned that under certain conditions the mainstream cannot accommodate a child's unique needs. These conditions may include destructive behavior, severe and profound multiple handicaps, and fragile medical or emotional states.

o Adaptive Learning Environment Model (ALEM)

The Adaptive Learning Environment Model is designed "to create school learning environments in which all students can learn basic academic skills and increase their confidence in their ability to learn and cope with the social and intellectual demands of schooling" (Epps & Tindal, 1987, p. 234).

The ALEM is based on the premise that all students learn in individual ways; therefore adaptive instruction is a feasible way for students to learn.

The ALEM consists of five major components:

1) a basic skills curriculum;
2) an instructional management system designed to maximize the use of resources;
3) a family involvement component designed to increase communication and cooperation;
4) a flexible grouping and instructional team system;
5) a data-based staff development program.

Students work individually and in small and large groups under the supervision of teachers. Instruction is individually planned and students progress through the curriculum at their own pace. Students are also taught to plan and monitor their own learning in cooperation with teachers. Special education support personnel provide diagnostic consultation and remedial instruction. Through the use of an ongoing staff development delivery system, implementation of the program is monitored and refined.

Epps and Tindal (1987) reported that research shows "consistent, positive trends regarding the feasibility of implementation and the effects of the program both on students' achievement in basic skills and on their social behavior and attitudes" (p. 235).

o Integrated Classroom Model (ICM)

The Integrated Classroom Model (Affleck, Madge, Adams & Lowenbraun, 1988) is designed to increasingly integrate handicapped and non-handicapped students by tailoring regular education to meet the needs of special needs students, and special education to meet the needs of non-handicapped students. Mildly handicapped and non-handicapped students (1:2 ratio) are instructed together using regular school curriculum and materials. Each student is assigned to an age-appropriate class in their neighborhood school with a target enrollment of 24 students per class. All teachers in integrated classrooms have some special education training.

Classrooms using the ICM model must have:

1) a high degree of structure with clear behavioral and academic expectations;
2) a variety of teaching methods designed to meet individual student needs;
3) cooperative learning situations; and
4) modified regular curriculum and materials.

o Inclusive Schooling Model

Strictly speaking, inclusive schooling is not a model, however, it is being described as one in the context of this section Inclusive schooling is based upon a philisophical belief that all students including those with severe disabilities are to be included in the mainstream of the school and in community life. This means that all students including exceptional students who live in a community would attend the regular neighbourhood school with their age appropriate peers as they would if they were not labelled as having a disability (Brow, et al. 1989).

It has been stated that schools in large urban populations face a challenge in becoming inclusive schools due to the high density of students with disabilities within the general student population. Placement of a large number of exceptional students into a large class may create an unmanageable responsibility for the regular education teacher. In addition, small grouping of exceptional students within a regular class could spoil the potential benefits of providing an integrated, inclusive learning environment (Stainback, Stainback & Forest 1989). M. Forest suggests that one student with a severe disability may be included into a regular classroom more readily than a number (Forest, 1987).

Characteristics of inclusive schools are as follows:

- Specialized services and supports are provided in the regular classroom to whomever is in need.
- The curriculum is adapted whenever necessary to meet the needs of exceptional students for whom the standard curriculum is deemed inappropriate.
- Natural supports both for students and staff are encouraged through cooperative and collaborative activities in the school community.
- Teachers and other school personnel are empowered to make decisions as to how the combined resources will be used to meet the needs of each of the students in the school (Stainback & Stainback, 1990).

- Collaborative/Consultative Model

The collaborative/consultative model can be viewed as a natural outgrowth of the move towards providing services to students in the least restrictive environment (Huefner, 1988). Idol (cited in Huefner, 1988) describes this model as "a process for providing special education services to students with special needs in which special education teachers, general education teachers, other school professionals, or parents collaborate to plan, implement, and evaluate instruction conducted in general classrooms for the purpose of preventing or ameliorating students' academic or social behaviour problems" (p.403). The goal of this model is to develop parity between regular and special education teachers in which ownership of the learning and behaviour problems of all students in the classroom is shared (West & Idol, 1987).

If implemented successfully, a number of potential benefits may be possible. These include a reduction of stigma, a better understanding across disciplines, increased special education skills for regular teachers, reduction of mislabelling and increased benefits to regular students (Huefner, 1988). However, there also exist a number of potential problems with casual or premature implementation of this model. These include ineffective caseload management, unrealistic expectations, inadequate support and funding and faulty assumptions regarding cost savings and program effectiveness (Huefner, 1988). It is important for this model to be viewed as a collaborative effort between regular and special education teachers. It is not designed to have special education teachers delivering special education instruction in the regular classroom. Rather, the intent is for regular classroom teachers to receive appropriate support services to enable them to successfully instruct exceptional children. While the philosophical basis for this model is sound, there have been few well designed studies which demonstrate whether the collaborative/consultative model is program effective (Huefner, 1988).

EFFECTIVE PRACTICES

The effectiveness of mainstreaming has not been clearly or consistently supported or discussed by the research. Perhaps the focus of investigation should centre, not on whether integration is more desirable than segregation, but on what variables are connected to effective instruction in both areas.

Effective Instructional Practices

Stainback, Stainback, Courtnage and Jaben (1985) highlighted three major regular instructional practices that may facilitate mainstreaming.

The first of these practices focuses on individualized programming to accommodate the unique needs of each child. Such programming would be criterion based. "Instructional objectives, pacing, and materials are selected according to their appropriateness to the individual student rather than norm-referenced or selected in accordance with expected averages for the student's peer group" (Stainback et al., p. 146).

The second instructional practice, inclusion of cooperative activities, refers to the social aspect of the environment. This will be addressed further in the following section on effective social skill instruction.

The third instructional practice advocated by Stainback et al. involves creating adaptive learning environments. Such environments support four main goals: "(a) identification of learning problems through a diagnostic-prescriptive monitoring system integrally related to the program's instructional component; (b) delabeling of mainstreamed special students and description of learning needs in instructional, rather than categorical terms; (c) individually designed educational plans that accommodate each student's learning strengths and needs; and (d) teaching of self-management skills that enable students to take increased responsibility for their learning" (Wang & Birch, 1984b, p. 33 as cited in Stainback et al., 1985, p.146).

Epps and Tindal (1987) also highlighted "significant elements" of effective instructional programs for mildly handicapped students, including: active teaching, frequent measurement and monitoring of students' mastery levels, and instructional sequences which are well described. These elements ensure that the program can be consistently implemented and allow for replication of the model.

Effective Social Skills Instruction

Gresham (1982) suggested that there is a difference between the intent and the actual implementation of integration for social purposes. Integration of students with disabilities to increase social acceptance and interaction may be a desirable goal, but simply placing these children in a mainstreamed setting does not ensure this will occur. Gresham cautioned that we must "reassess our current proclivities toward indiscriminate mainstreaming. Redirection of efforts toward social skills assessment and training before, during, and after integration into regular classrooms should allow both handicapped and non-handicapped children to extract maximum positive benefits from mainstreaming efforts" (p.430).

Several strategies may be effective in providing increased social interaction (Sasso & Rude, 1988). These include peer tutoring, curricular infusion techniques in which students are taught about various disabilities, peer initiation interventions that assist non-handicapped students to interact socially with handicapped children, and "special friends" programs that pair handicapped and non-handicapped students.

Fox (1989) suggested that social skills training should have a dual approach. Handicapped students are taught positive social behaviour through modelling, shaping, coaching and problem solving. Attitudes of non-handicapped students are changed through role playing, peer tutoring and reinforcement.

The structure of the learning situation can also encourage social interaction (Hoben, 1980), for example, thinking about the physical arrangement of the classroom, reducing the amount of time handicapped students are pulled out of the class, and facilitating cooperative learning. Structured cooperative learning activities can increase the interaction among all students, encourage and develop social skills and enhance the appreciation of individual differences. Competitive situations and large amounts of individual instruction, in contrast, may promote rejection and isolation of students with disabilities (Johnson & Johnson, 1980).

Characteristics of the Most Enabling Environment

Clearly, quality of education should take precedence over the location of the program. However, the best place for exceptional students to be educated is likely to be in their neighborhood, provided that the school has the resources to ensure that their needs are met.

These are likely to be some characteristics of a "most enabling learning environment."

- Students are not labelled or categorized.
- Students are allowed the "dignity of risk" and learning is characterized by high teacher expectations.
- Peers are used as tutors.
- Students progress at their own rate.
- Students are successful, as indicated by achievement of measurable outcomes.
- The curriculum is functional.
- The curriculum is based on the principles of child development.
- Group activities are chosen that allow participation by all participants.
- Students are provided with opportunities to interact with non-handicapped peers.
- The program addresses social and emotional as well as academic achievement factors.
- Individualized instruction is provided.
- The teacher ensures that the attention of the student is maintained and that time spent on task is "quality" time.
- Programs are planned and monitored systematically.
- The physical setting for learning is appropriate.
- Parents are actively involved in all stages of the program.

COST IMPLICATIONS

Many researchers mention that integration should not be viewed as a cost-saving measure. Stainback and Stainback (1989) note the critical importance of "the integration of resources and personnel as well as students into regular education" (p.255). They suggest that the high cost of segregated special education programs places a tremendous drain on available resources, resulting in a less effective program for both regular and special needs students.

Funding for special education services also tends to fluctuate according to economic conditions. That is, when there is more money available, larger numbers of special needs students tend to be identified. In times of budget restraint, support services are often reduced or withdrawn (Affleck, Madge, Adams & Lowenbraun, 1988).

To examine the costs associated with integration, we need a clear description of the characteristics of the service delivery model. The concept of integration is based on a continuum of service delivery which tends to become ill-defined at the extreme ends. However, the continuum ranges from partial pullout programs (e.g., resource rooms) and centralized categorical programs (e.g., opportunity rooms) in "regular" schools to the inclusive school concept where all students with special needs are served in their neighborhood schools in classes with their same-age peers. The resource room and opportunity room model, typical in many school jurisdictions in Alberta, is the traditional approach. The inclusive school concept, which may be considered to be more aligned with the Minister's Vision Statement on integration, is a more progressive approach.

The inclusive school approach is characterized by the following:

- Programs for students are based on the student's instructional needs rather than on labelling. Instructional needs and planning is the responsibility of and is conducted by the regular classroom teacher or in conjunction with a teacher problem-solving team.

- All exceptional students integrated for a substantial portion of the instructional day. Only in exceptional circumstances do these students receive services in a segregated setting (e.g. non-educational services for severely handicapped students).

- The majority of mildly handicapped students (e.g. learning disabled or educable mentally handicapped) function in the "inclusive" classroom, independent of additional support services (e.g., program aides).

- Aides are provided for moderately and severely handicapped students at a level commensurate with their functioning ability in the various learning activities they undertake.

To date, little data is available which compares the costs of operating an inclusive school to the more traditional approaches of serving exceptional students. One study (Affleck, Madge, Adams and Lowenbraun, 1988), along with informal discussions with school authorities from two school districts that operate inclusive schools, suggested that there is no significant cost increase in operating inclusive programs for students with mild special needs. More study would be required to make any observations about the relative costs of different programs for moderately and severely handicapped students.

For the purpose of discussion, the following assumptions about the cost implications of operating an inclusive school program have been made:

- Psychological services for purposes of identifying students according to categories for placement purposes may be reduced.
- Program costs for mildly handicapped students may be reduced as "regular" classroom teachers assume greater responsibility for program planning and implementation.
- The cost of inservice and consultative support services to regular classroom teachers for the purposes of diagnosis and program planning may be increased.
- Students with moderate to severe handicapping conditions may require increased one-on-one aide support.
- Transportation costs may be reduced as all students would remain in their neighborhood schools.

IMPLICATIONS FOR THE FUTURE

Winzer says, "Although mainstreaming has become the dominant ideology in special education, no other concept seems so fraught with confusion and misconceptions" (1987), p.16

Mainstreaming is intended to offer a range of services that enable educational programs to be tailored to meet the individual needs of students. Such services should be adaptable to a variety of settings using a modified curriculum and supported through various professionals. Special help should be received in the regular classroom to the maximum extent appropriate. In addition, mainstreaming should facilitate peer contact and interaction.

Integration is not intended to eliminate all special classes, special education teachers, and support services. Nor is it intended to indiscriminately "dump" all children from special education classes into regular education. Emphasis must be shifted from the physical setting to practices which promote effective academic and social skills instruction.

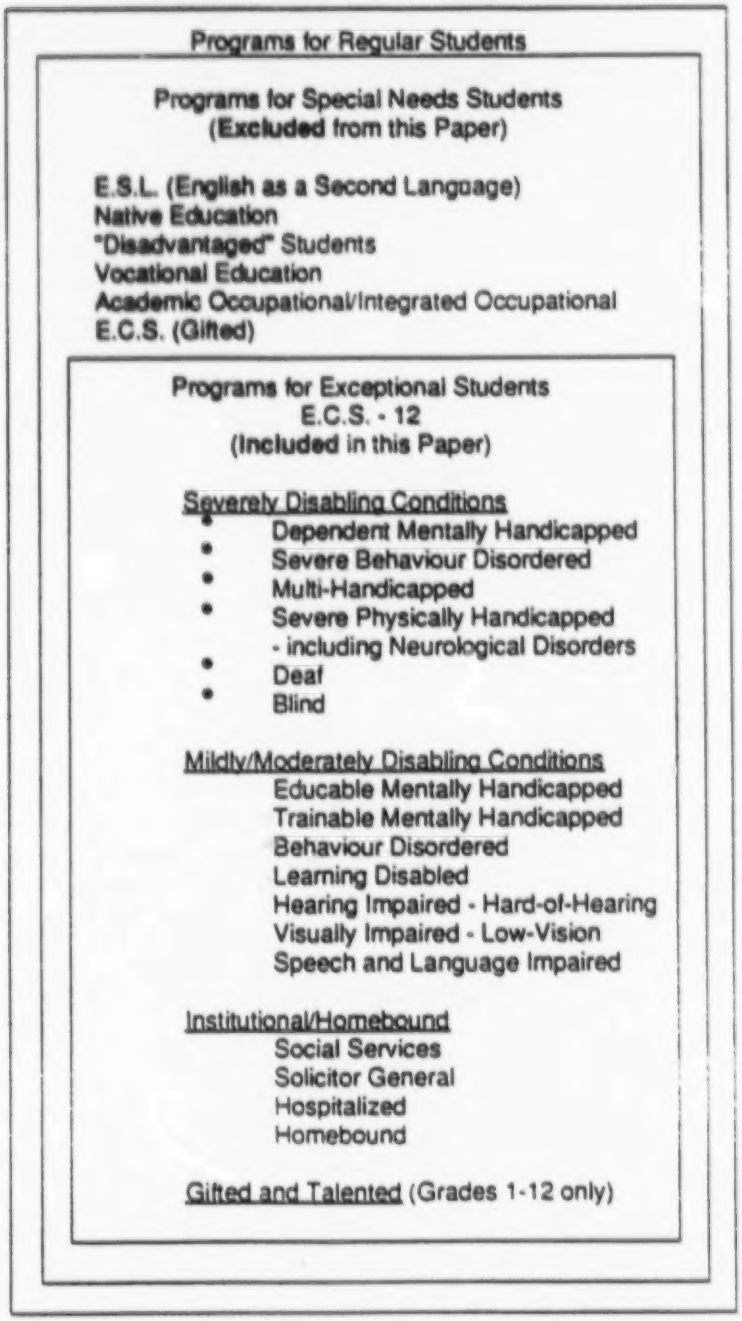
Discussions about adopting and implementing widespread integration should address these issues:

- Teacher training, preservice and inservice.
- Attitudes of parents, teachers and students.
- Methodologically sound studies to increase the knowledge base.
- Support services and resources to ensure effective integration practices.
- Mainstreaming as a continuum of services.

Stainback and Stainback (1989) state that **"whether we integrate our schools is in the final analysis not a scientific or research issue. It is one of equality for all society's members"** (p.262). If integration is considered a moral and ethical imperative, then school districts are obligated to implement practices which ensure appropriate and equitable instruction for every student.

APPENDIX A

Exceptional Students in the School Context: Special Education Programs



Depending upon the degree of disability these students may also be included in the category "Severely Disabling Conditions"

APPENDIX B

LIMITATIONS OF THE RESEARCH

Many of the studies which report positive results for mainstreamed students lack the rigor necessary for effective research design. These "studies" rely on anecdotal reports by parents, students and teachers who express positive reactions to a mainstreamed setting (Reynolds & Birch, 1988). These are more likely to reflect an endorsement of the philosophical underpinnings of integration than to be based on actual growth in outcome indicators.

Recognition of the inadequacies of anecdotal studies prompted a number of efforts to do more rigorously designed research. However, many of these studies suffered from serious methodological shortcomings as described below.

> A major problem in attempting to evaluate the efficacy of special education for a particular category is that each category represents a heterogeneous group of students who have been classified according to diverse and often ambiguous criteria that may vary from district to district... (Epps & Tindal, 1987, p. 216).

The severity of the disability (mild to severe) and the age of the student may also be a factor on the effectiveness of any integration (Ruhl, 1983). A student's previous placement history must also be considered because there is a potential for past educational interventions to interact with current program placement (Epps & Tindal, 1987).

There are many factors involved in any education program: for example, the amount of instructional time, the degree of integration into regular classrooms, the clarity of goals and objectives, the teacher's attitude, consistency in applying instructional methods and materials, and the methods of monitoring student progress (Ruhl, 1983). Such factors may have a greater impact on the effectiveness of instruction than the setting in which that instruction occurs. Control of these factors requires, a model of instruction which promotes good pedagogy and facilitates replication in other research situations.

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